Appl. No. 10/753,242 Preliminary Amendment dated January 23, 2004

Amendments to the Specification:

Please replace the paragraph beginning at page 1, line 7, with the following rewritten paragraph:

Conventional three-way diaphragm valves direct fluid entering the diaphragm valve through one of two possible outlet ports to a desired destination by adjusting the position of a diaphragm. Having the shape of a "T," conventional three-way diaphragm valves include a through portion, represented by the horizontal member of the T, and a branched portion represented by the vertical portion. The diaphragm, typically disposed at the intersection of the two members, interferes with the fluid flowing through the diaphragm valve to direct the fluid through an appropriate interior passage leading to the desired outlet port. Air, or other suitable fluid, can be introduced or removed from one side of the diaphragm to pneumatically or hydraulically adjust the diaphragm position to appropriately direct the fluid.

Please replace the paragraph beginning at page 2, line 3, with the following rewritten paragraph:

Improper operation of a diaphragm valve can also arise when a diaphragm actuation mechanism malfunctions and the diaphragm fails to be adjusted to one of its fluid directing positions. When this occurs, the fluid intended to be directed through a desired outlet port is erroneously discharged through the other outlet port. To permit indirect observation of the diaphragm's position during operation of the diaphragm valve, a rod typically extends from the diaphragm into an actuation chamber, which is an enclosure on a side of the diaphragm opposite of the interior passage through which the fluid flows through the diaphragm valve. For a pneumatically or hydraulically actuated diaphragm valve, air is introduced to, or removed from, the actuation chamber to expand or retract the diaphragm position, respectively. The rod includes an indicator disposed at an end of the rod that is extended away from the diaphragm such that the indicator rises and falls with the adjustment of the diaphragm. A transparent window disposed in a cap enclosing the

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diaphragm valve allows the indicator to be observed through the window when the diaphragm is adjusted to an elevated position. Air introduced into the actuation chamber forces the diaphragm in a downward direction. When this occurs, the downward motion of the diaphragm lowers the indicator such that it is no longer visible through the window. Visual inspection of the indicator's position through the window indicates the current position of the diaphragm. Such a system of providing a visual indicator of the diaphragm's position adds to the complexity of the diaphragm valve, thereby increasing the cost of its manufacture.

Please replace the paragraph beginning at page 10, line 22, with the following rewritten paragraph:

A valve stem 67 is operatively coupled to the diaphragm 29 to rise and fall axially along axis 69 (Figure 3) as the position of the diaphragm 29 is adjusted. The valve stem is provided at one end with a washer 71 and at an opposite end with a plunger 74. The washer 71 encircles a portion of the valve stem 67 extending through the diaphragm 29 and into an actuation chamber 77 for accepting and releasing a fluid (not shown) to adjust the position of the diaphragm 29. According to the illustrative embodiment, the diaphragm valve 10 is pneumatically or hydraulically actuated, meaning air is introduced to, and removed from, the actuation chamber 77 to adjust the position of the diaphragm 29 between the first and second positions. Air introduced into the actuation chamber 77 through an aperture 81 in the cap 55 creates a sufficiently high pressure in the actuation chamber 77 to force the washer 71 and the diaphragm 29, away from the actuation chamber 77. This results in the diaphragm 29 being adjusted to the second position as shown in Figure 3. Similarly, air removed from the actuation chamber 77 through the aperture 81 causes the pressure in the actuation chamber 77 to fall to a sufficiently low level to return the diaphragm 29 to the first position shown in Figure 2. Air, and/or any other fluid to be introduced into the actuation chamber 77 to adjust the position of the diaphragm 29 can be introduced by means other than the aperture 81 in the cap. The fluid can be introduced through an interior passage (not shown) formed within the housing 12, for example.

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Please replace the paragraph beginning at page 14, line 12, with the following rewritten paragraph:

When it is desired to discharge the fluid entering one of the first and second ports 14, 18 through the third port 22, the position of the diaphragm 29 is adjusted to the second position by introducing the actuation fluid into the actuation chamber 77 through the aperture 81 in the cap 55. According to the illustrative embodiment, air is introduced as the actuation fluid since the diaphragm valve 10 has been described as pneumatically or hydraulically actuated. The building pressure in the actuation chamber 77 forces the diaphragm 29 into the through portion 35 of the interior passage 26 until the pressure is sufficient to bring the diaphragm 29 into communication with the seat 84. After said communication has been established, the pressure within the actuation chamber 77 is maintained at a suitably high level to minimize the leakage of fluid through the interface between the diaphragm 29 and the seat 84. Figure 3 illustrates the diaphragm 29 adjusted to the second position. While the diaphragm 29 is making the transition from the first position to the second position, the plunger 74 is translated axially within the branched portion 38, along with the valve stem 67, toward the third port 22. Once the plunger 74 is removed from the aperture 42, the fluid can flow through the aperture 42 to exit the diaphragm valve 10 through the third port 22 by way of the branched portion 38.